

What is claimed is:

1. An organic light-emitting diode for a display, comprising:

an anode layer;

an emissive layer;

5 a cathode including an electron injecting layer and an electrical conducting layer; and

a cathode contact layer which electrically connects the cathode and an electrical driving system of the display,

wherein the electrical conducting layer of the cathode is electrically connected with the cathode contact layer and the electron injecting layer is not in direct contact the cathode contact layer.

2. The organic light-emitting diode of claim 1, wherein the electrical conducting layer of the cathode directly contacts at least a portion of the cathode contact layer.

15 3. The organic light-emitting diode of claim 1, wherein the electron injecting layer of the cathode is formed of at least one of lithium fluoride, barium, barium oxide, and calcium oxide.

4. The organic light-emitting diode of claim 1, wherein the emissive layer is formed of a light-emitting polymer.

5. The organic light-emitting diode of claim 4, wherein the light-emitting polymer includes polyphenylenevinylenes and polyfluorenes.

6. The organic light-emitting diode of claim 1, wherein the emissive layer is formed of polyethylene-dioxythiophene and a light-emitting polymer.

7. The organic light-emitting diode of claim 6, wherein the light emitting polymer is paraphenylene vinylene.

8. The organic light-emitting diode of claim 1, wherein the emissive layer includes a hole injecting layer and a light emitting electron conducting layer.

9. The organic light-emitting diode of claim 8, wherein the hole injecting layer is formed of N, N'-di(naphthalene-1-yl)-N, N'-diphenyl-benzidine, and the light-emitting electron conducting layer is formed of 8-hydroxyquinoline aluminum.

10. The organic light-emitting diode of claim 1, wherein the electrical conducting layer is formed of aluminum or silver.

11. The organic light-emitting diode of claim 1, wherein the anode layer is formed of indium tin oxide.

12. The organic light-emitting diode of claim 1, wherein the cathode contact layer is formed of indium tin oxide.

5 13. An organic light-emitting diode for a display, comprising:
an anode layer;
an emissive layer;
a cathode including an electron injecting layer and an electrical conducting layer;
a cathode contact layer which electrically connects the cathode and an electrical driving
10 system of the display; and

a connecting layer formed of an electrically conductive material, the connecting layer directly contacting the cathode contact layer and the electrical conducting layer of the cathode.

14. The organic light-emitting diode of claim 13, wherein the connecting layer is
15 formed of copper or gold.

15. The organic light-emitting diode of claim 13, wherein the electron injecting layer of the cathode is formed of at least one of lithium fluoride, barium, barium oxide, and calcium oxide.

20 16. The organic light-emitting diode of claim 13, wherein the emissive layer is formed

of a light-emitting polymer.

17. The organic light-emitting diode of claim 16, wherein the light-emitting polymer includes polyphenylenevinylenes and polyfluorenes.

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18. The organic light-emitting diode of claim 13, wherein the emissive layer is formed of polyethylene-dioxythiophene and a light-emitting polymer.

19. The organic light-emitting diode of claim 18, wherein the light-emitting polymer is paraphenylene vinylene.

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20. The organic light-emitting diode of claim 13, wherein the emissive layer includes a hole injecting layer and a light-emitting electron conducting layer.

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21. The organic light-emitting diode of claim 20, wherein the hole injecting layer is formed of N, N'-di(naphthalene-1-yl)-N, N'-diphenyl-benzidine, and the light-emitting electron conducting layer is formed of 8-hydroxyquinoline aluminum.

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22. The organic light-emitting diode of claim 13, wherein the electrical conducting layer is formed of aluminum or silver.

23. The organic light-emitting diode of claims 13, wherein the anode layer is formed of indium tin oxide.

24. The organic light-emitting diode of claim 13, wherein the cathode contact layer is
5 formed of indium tin oxide.

25. A method of fabricating an organic light-emitting diode for a display, the method comprising:

forming an anode layer on a first portion of a substrate;
10 forming a cathode contact layer on a second portion of the substrate;
forming an emissive layer on the anode layer;
forming an electron injecting layer of a cathode on the emissive layer; and
forming an electrical conducting layer of the cathode on the electron injecting layer, the
electrical conducting layer of the cathode directly contacting at least a portion of the cathode
15 contact layer.

26. A method of fabricating an organic light-emitting diode for a display, the method comprising:

forming an anode layer on a first portion of a substrate;
20 forming a cathode contact layer on a second portion of the substrate;
forming an emissive layer on the anode layer;

sequentially forming an electron injecting layer and an electrical conducting layer of a cathode on the emissive layer; and

forming a connecting layer, the connecting layer directly contacting the cathode contact layer and the electrical conducting layer of the cathode.

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27. The method of claim 25, wherein a shadow mask is used to form at least the electron injecting layer and the electrical conducting layer such that at least the electron injecting layer is not in direct contact with the cathode contact layer.

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28. The method of claim 26, wherein a shadow mask is used to form at least one of the electron injecting layer and the electrical conducting layer such that the electron injecting layer is not in direct contact with the cathode contact layer.

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29. The method of claim 26, wherein a shadow mask is used to form the connecting layer.